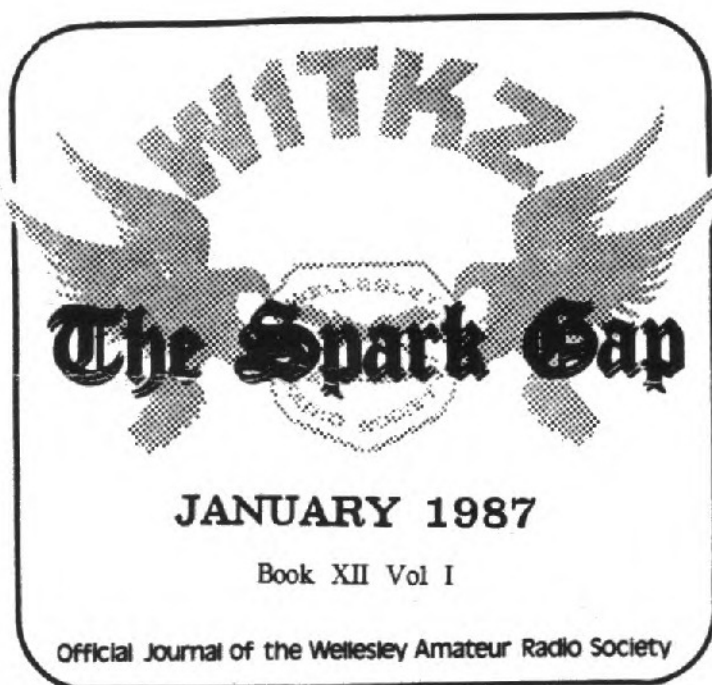




President's Message

by Tom Kinahan, N1CPE

Happy New Year! I hope your holidays were pleasant. Special thanks to Liz Valero (XYL of ND1Z) and Natalie Weare (XYL of NF1Z) for putting together our W.A.R.S. holiday get together, and to Natalie and Ged for donating their home for the event. For items of note this month, there will be no meeting on the first Thursday of January as it is the 1st, and we'll all be taking it easy after the holidays and getting ready to go back to work. Frank MacKenzie-Lamb, NG1I is giving a talk on the third Thursday of January on Search and Rescue.

Advanced Class Completed

The Advanced Class has now completed. Thanks to all the teachers who worked hard to present advanced theory. The students also deserve commendation for their efforts to keep up with the massive volume of technical material.

Ged, NF1Z taught Circuits I and Circuits II. His information came from personal experience of building many projects. Mort, KA1IU presented Emissions And Signals with his usual accuracy and clarity. Bob, N1DRB did a terrific job teaching Antennas And Feedlines.

Many thanks to all who have contributed to our first Advanced Class. It was a success which has been preserved on videotape for future upgraders.

Novice Class

The Novice class will be starting Monday, January 5 through January 30 at the Wellesley Red Cross. Please encourage your friends to attend and obtain their tickets. We are also looking for teachers.

Please consider teaching a night of the Novice Class. Novice theory is a breeze and it really is fun to help someone into the hobby. Also think about helping the class participate in the Novice Roundup. This will be their introduction to contesting and CW operations.

MEETINGS THIS MONTH: _____

January 15, 1986 at 7:30 P.M.
211 Washington St., Wellesley

The last class will be an "ON-AIR" session in which each student takes the plunge and operates W1TKZ as a third party. The first QSO is often such a stumbling block that it is best to get each new Novice on the air as soon as possible.

Novice Class

DATES: January 5 to March 30,
Monday Nights
TIME: 7 PM to 9 PM
PLACE : Wellesley Red Cross
REGISTER : Call Vern ND1Z 533-6822

Please pitch in and help make this year's Novice Class a great one !

Below is the schedule:

DATE	SUBJECT	TEACHER
1/5	Introduction And Demos	NG11, ND1Z
1/12	Rules And Regs	N1EHM, N1EHI
1/19	Basic Electricity	???
1/26	Ohms Law	???
2/2	Components	???
2/9	Receivers and Transmitters	???
2/16	— HOLIDAY —	—
2/23	Antennas And Feedlines	???
3/2	Propagation	???
3/9	Operations	???
3/16	New Privileges; Modulation	ND1Z
3/23	EXAM NIGHT	—
3/30	ON-AIR NIGHT	—

New Tickets !

Congratulations to Franklin H. Stuart (WA1WNR) on his upgrading to General Class recently, to Jim Charboneau (ex KA1OJA) on upgrading to advanced and to a new call, KC1BB and to Bill, N1EHM, on his upgrade to General.

Congratulations to Liz Valero (YL of ND1Z) for joining the ranks of the Novices! Liz is still waiting for her call to arrive!

Spark Gap Series On Computers

The Spark Gap will feature a five part series entitled "Computers And Ham Radio" starting next month. The series will explain the workings of computer hardware and software to those who do not normally use or work with computers. A special emphasis will be placed on the application of computers in Amateur Radio.

February	<i>So this is a Computer</i>
March	<i>Making Computers Work</i>
April	<i>Ham Radio Computer Applications</i>
May	<i>How Computers Talk With Each Other</i>
June	<i>Operating Packet Radio</i>

We hope that you will enjoy this series. (Editor's note: a special thanks to Vern Valero for volunteering this series in spite of his busy schedule as Education Chairman.)

Christmas Party

The WARS Christmas party was well attended and a fun event. Many Thanks to Jed (NF1Z) and Natalie who volunteered the use of their home for the evening. A large variety of homecooked meals and deserts tempted the party-

Calendar ! Calendar !

- December 31 : Straight key night
- January 5 : W.A.R.S. Novice Class starts
- January 10-12 : VHF Contest
- January 15 : W.A.R.S. meeting

The Spark Gap

Official Journal of the Wellesley Amateur Radio Society

Editor:

Jon Freeman

17 East Meadow Road

Lowell, Ma. 01854

The Spark Gap is a monthly publication of the Wellesley Amateur Radio Society, its sole purpose is to keep its members abreast of current happenings, FCC rule & regulation changes and to list equipment offered for sale or trade by members. Members are encouraged to contribute to the Spark Gap and may send their articles to the editor's address or to the club address.

The Wellesley Amateur Radio Society is a non-profit organization dedicated to the promotion of Amateur Radio through instruction, fellowship, demonstration and participation. Annual membership in the society is \$10 and the club year runs from September 1 through June 30. Amateur Novice through Advanced classes are conducted regularly at no cost to the participants. To enroll in a class or gain information about the Society in general, write to :

The Wellesley Amateur Radio Society

211 Washington Street

Wellesley, Ma. 02181



goers. Following dinner a team-effort game of Trivial Pursuit was played. The star of the game was Stan, N1EHG who seems to know just about everything. Thanks to all who worked hard to make the party a fun night out!

Liz Valero

Repeater

We're looking (or listening) to the repeater and figuring what can be done to improve its performance. The present antenna was purchased in 1980 and is in need of replacement. As there is no budget for such an item, I propose that the membership answer the call as before when we

purchased the repeater two years ago. The expected cost of a replacement antenna is approximately \$300. We are asking you, the membership, to help us buy the antenna. For this reason, if you feel you use the repeater, and would like to see it work better, please consider sending \$20 towards the replacement antenna. Donors will gain the respect of club members as their names will be published in the Spark Gap and we'll all gain a better repeater system.

Please note that of your club dues, no money is allocated to the purchase of capital equipment as this is. Your \$10 dues covers costs in providing 10 issues of the Spark Gap.

If you can't afford to donate \$20 towards the repeater system and still want to help, anything will be gratefully accepted.

Please send checks to :

Wellesley Amateur Radio Society
Repeater Committee
211 Washington St.
Wellesley, Ma. 02181

OFFICERS

President

Tom Kinahan, N1CPE, 898-2749

Vice President

Rita Baker, N1DDI, 481-0863

Recording Secretary

Roger Smith, W1EOA, 235-6239

Corresponding Secretary

Arthur Thompson, KA1ENP, 235-5509

Treasurer

C.J. McDonald, WB1BUM, 332-6091

Fund Raising

David Kent, N2AWG, 875-2126

Operating Activities Chairman

Bob Drapeau, KT1K, 883-1132

Education Chairman

Vern Valero, ND1Z, 533-6822

Repeater Committee Chairman

Paul Davis, N1EGC, 646-3599

Search & Rescue

Our featured speaker this month is Frank MacKenzie-Lamb NG1L. Frank is a graduate of W.A.R.S. license classes, a Natick resident, and a Wayland Police officer. Frank will speak on January 15th on the subject of search and rescue at the Wellesley Red Cross. Don't miss this exciting talk!

Contesting

The major reasons for Amateur Radio's existence is for Emergency Communications to advance the radio art and to promote international goodwill. One of the fun ways of fulfilling these goals is to get involved in contesting.

Many types of contests exist today for hams, there are DX contests where we exchange information with stations in other sometimes exotic lands, there is Field Day, and November Sweepstakes, in which some information bearing a resemblance to formal written third party traffic is sent and received, and there are VHF and UHF contests where simply making contact can be a monumental task (try working 10,000 MHz over 150 miles with 10 milliwatts), and much less information is transferred. All of these contests have one common purpose, that is, to transfer information from one point to another point accurately.

I happen to enjoy the possibility of making VHF contacts via unusual propagation modes like meteor scatter, aurora, tropo and E-skip (I'd like to try EME and hear my echoes off the moon!). Others may enjoy RTTY or may like particular bands such as 160 meters.

The thing that makes many of these contests quite interesting, is that most of them have the goal of talking to as many stations as possible, in

as widely a distributed area as possible. As an example, the ARRL November Sweepstakes has the goal of talking to each and every ARRL section in the U.S. and Canada.

Typically, scoring is based on the number of contacts you have made multiplied by the number of sections, or areas as defined by the contest. Some contests weight certain modes of operation if they are multi mode contests. For example, Field Day weighs each CW contact as 2 points, and each phone contact as 1 point. Some give bonuses for specific stations like those on emergency power, or on solar power. Other contests such as VHF contests weigh bands differently. Lower frequency VHF bands that are typically easy to operate on such as 6 and 2 meters are 1 point per contact. But when you get up into the area of 1296 MHz or above contacts are 3 points each. All this is multiplied by the total number of grid squares you've contacted (this is in the report you get from the other station).

There are two basic approaches to contesting, once you're understanding the basics. First, you can call CQ looking for stations to contact. In your CQ you usually mention that you are operating a contest. An example :

Phone : 'CQ Sweepstakes from W-1-T-K-Z'

CW : 'CQ SS DE W1TKZ K'

Usually, repeating this more than once is not necessary, because if you're calling CQ and somebody hears you, they'll answer you right off the bat. But if nobody does answer you, then you just key down and say the same thing again.

When somebody answers you, and you're calling CQ, you carefully copy the call of the station and send your report. The report varies for different contests, from simply a grid square,

or a CQ zone, to ARRL section, power output, year you were first licensed, number of transmitters and serial number of the contact. The station will send you his report, you thank him and continue calling CQ. Typically, you don't stop to ragchew with the station because it can be valuable contacts you are missing while you are talking. There is usually plenty of time after the contest to discuss the results and anything else.

The other basic philosophy is to answer CQ's. It's not hard to just tune around and contact the stations in rare places.

The following is a normal QSO in the ARRL VHF contest :

'CQ Contest, CQ VHF contest from W1TKZ, Whiskey One Tango Kilo Zulu.'

'Nancy One Charley Papa Echo'

'N1CPE, Please copy FN33, Foxtrot November Three Three'

'QSL. Nice signal here. Please copy FN42, Fox Nancy Four Two'

'Roger. Thanks for the call and good luck, QRZ contest from W-1-T-K-Z'

Now a sample QSO from November Sweepstakes :

'CQ Sweepstakes from W1TKZ, Whiskey One Texas Kansas Zanzibar'

'N1 Charley Papa Echo'

'Papa Echo, again please?'

'November One Charley Papa Echo'

'N1CPE, Please copy Number 123 Alpha Whiskey One Texas Kansas Zanzibar Fifty Three, Five Three Eastern Massachusetts, over'

'Need your number please, please copy, Number 23 Two Three Bravo, Nancy One Charley Papa Echo 82 Eighty Two, Western Mass, your number please?'

'Roger, Number 1-2-3 One Hundred Twenty Three, ok?'

'Ok, QSL and Good Luck'

'Seventy Three, Q-R-Zed Please from W-1-T-K-Z, Sweepstakes'

And that's it. Notice, that some mention is made of signal quality, but in these contests, no signal report is necessary.

Awards are usually given in the form of certificates to stations scoring the highest in the country, section or division as well as having their scores published.

Many contests only allow contacting another station once per contest, and some allow you to contact the same station more than once if the contacts are on different bands.

Submitting scores is basically the honor system. You certify that the log you send the sponsor is true and accurate. Logs are checked to some extent by cross referencing two stations logs that say they worked each other. Points are taken off the claimed score if there are too many mistakes or the logs are illegible.

Best of all, to participate in a contest, you don't have to submit logs if you don't want to. You may feel that your effort in the contest was not up to par with what it might have been, or you may think it just may be too much work. In either case, the fact that you don't submit logs in no way means that you can't participate. I do suggest that you determine the proper exchange either by listening to some

contacts being made or by reading up on the contest.

But now, you may ask, what is all this good for? I knew you'd ask. Contesting lets you practice in a competitive atmosphere the accuracy, speed of contacts, and the fact you do it under what could possibly be adverse band conditions. Contesting helps you really increase your radio operating skills in a fun, competitive way. Contesting helps you attain certain awards like WAS, VUCC, WAC. It makes one a proficient radio operator that has the skill to get information through when it's not possible otherwise. The speed of contacts, challenges you to get the information accurately and flawlessly.

Many comments are made on contest weekends regarding 'those dang contesters.' I defend contesters when I say that contesters are improving their radio operating skills. Ragchewing is great fun talking to friends far away, but can a person who does nothing but complain about contesters hold his water when it comes time to a real test of his operating skills?

Major contests :

- January VHF sweepstakes
- Novice Roundup
- County Hunters Contest
- The Great Armadillo Run
- Mass. QSO Party
- Field Day
- June VHF Contest
- CQ WW
- November Sweepstakes - Phone - CW

- International DX contest
- ARRL UHF Contest
- ARRL 160M contest
- ARRL 10M contest
- September VHF contest

Car Thief !

from Westlink Report, 12/12/86

How do you catch a car thief ? Simple. Call him on the stolen car's cellular telephone. According to Personal Communications Technology magazine, that's exactly what Milwaukee insurance agent Kurt Voss did when his cellular telephone equipped Oldsmobile was stolen from a service station parking lot.

Voss was shocked when the 16 year old who had stolen the car answered the phone. He also realized that he might be able to trace down the thief if some strange telephone numbers showed up on his cellular telephone bill. Sure enough, one did and it turned out to be the friend of the boy who had stolen Voss' car.

It took persistence on his part, but after calling six times Voss finally coaxed the name and address of the alleged car thief out of the friend. That information he gave to the police who in turn arrested the suspected auto thief.

But there's no happy ending here. By the time that Voss' car was finally found, it had been stripped and set afire by the thief. Voss told the Milwaukee Journal that he went to the extremes he did because, "I was so upset and angry at my car being stolen that at whatever expense, I wanted to catch the guy." He did !